

LPDES PERMIT NO. LA0005738, AI No. 1708

LPDES FACT SHEET and RATIONALE
FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM
(LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA

- I. Company/Facility Name: Chevron Oronite Company, LLC
Oak Point Plant
10285 Highway 23 South
Belle Chasse, Louisiana 70037
- II. Issuing Office: Louisiana Department of Environmental Quality
(LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313
- III. Prepared By: Christy Clark
Industrial Permits Section
Water Permits Division
Phone #: 225-219-3401
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Date Prepared: July 14, 2009

IV. Permit Action/Status:

A. Reason For Permit Action:

Proposed reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2711/40 CFR 122.46*.

LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.2301, 4901, and 4903.

- B. NPDES permit - NPDES permit effective date: N/A
NPDES permit expiration date: N/A
EPA has not retained enforcement authority.
- C. LPDES permit - LPDES permit effective date: September 1, 2004
LPDES permit expiration date: August 31, 2009
- D. Application received on April 23, 2009. Additional information received via e-mails dated June 4, 2009 and August 19, 2009.

Fact Sheet and Rationale for
Chevron Oronite Company, LLC, Oak Point Plant
LA0005738, AI No. 1708
Page 2

V. Facility Information:

- A. Location - 10285 Highway 23 South, Belle Chasse
Latitude 29°48'37", Longitude 90°00'39"

- B. Applicant Activity -

According to the application, Chevron Oronite Company, LLC, Oak Point Plant, is a chemicals manufacturer and manufactures and/or blends petroleum oil additives and specialty compounds including lubricating oil additives, gasoline additives, grease thickeners, detergents, dispersants, antioxidants, corrosion inhibitors, antiwear agents, and other specialty compounds.

- C. Technology Basis - (40 CFR Chapter 1, Subchapter N/Parts 401, 405-415, and 417-471 have been adopted by reference at LAC 33:IX.4903)

Guideline

Organic Chemicals, Plastics,
and Synthetic Fibers

Reference

40 CFR 414 (Subparts G, H, and I)

Process Flow - 2.142 MGD

Other sources of technology based limits:

LDEQ Stormwater Guidance, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6)
Best Professional Judgment
Current LPDES Permit effective September 1, 2004

- D. Fee Rate -

1. Fee Rating Facility Type: Major
2. Complexity Type: VI
3. Wastewater Type: II
4. SIC code: 2869 and 2992

- E. Continuous Facility Effluent Flow - 24.433 MGD

VI. Receiving Waters: Mississippi River

1. TSS (15%), mg/L: 16
2. Average Hardness, mg/L CaCO₃: 151.84
3. Critical Flow, cfs: 141955
4. Mixing Zone Fraction: 0.3333
5. Harmonic Mean Flow, cfs: 366748
6. River Basin: Mississippi River, Segment No. 070301
7. Designated Uses:

Fact Sheet and Rationale for
Chevron Oronite Company, LLC, Oak Point Plant
LA0005738, AI No. 1708
Page 3

The designated uses are primary contact recreation, secondary contact recreation, fish and wildlife propagation, and drinking water supply.

Information based on the following: LAC 33:IX Chapter 11;/Recommendation(s) from the Engineering Section. Hardness and 15% TSS data come from monitoring station 320 on the Mississippi River listed in Hardness and TSS Data for All LDEQ Ambient Stations for the Period of Record as of March 1998, LeBlanc. This information was provided in a Memorandum from Todd Franklin to Christy Clark dated May 15, 2009 (See Appendix D).

VII. Outfall Information:

Outfall 001

- A. Type of wastewater - The continuous discharge of once-through noncontact cooling water, boiler blowdown, and intermittent discharge from Internal Outfall 101 (including clarifier underflow, filter backwash, and softener blowdown).
- B. Location - After the last collection point in the Utilities and Filters Area, near the intersection of K Street and 5th Street (Latitude 29°48'33", Longitude 90°00'26").
- C. Treatment - None
- D. Flow - Continuous, (Max 30-Day) 22.200 MGD
- E. Receiving waters - Mississippi River
- F. Basin and segment - Mississippi River Basin, Segment 070301

Internal Outfall 101

- A. Type of wastewater - The intermittent discharge of the underflow stream from the raw river water intake clarification system, filter backwash, and softener blowdown.
- B. Location - At the point of discharge of the underflow from the raw river intake clarifier in the Utilities and Filters Area on the west side of the clarifier unit on 5th Street prior to combining with the waters of Outfall 001 (Latitude 29°48'35", Longitude 90°00'32").
- C. Treatment - Treatment consists of:
 - settling
 - filtration
 - lime precipitation

Fact Sheet and Rationale for
Chevron Oronite Company, LLC, Oak Point Plant
LA0005738, AI No. 1708
Page 4

- D. Flow - Intermittent, (Max 30-Day) 0.685 MGD
- E. Receiving waters - Mississippi River via Final Outfall 001
- F. Basin and segment - Mississippi River Basin, Segment 070301

Outfall 002

- A. Type of wastewater - The continuous discharge of wastewaters from Internal Outfalls 102 and 202.
- B. Location - At the point of discharge prior to combining with the waters of the Mississippi River (Latitude 29°48'26", Longitude 90°00'31").
- C. Treatment - None
- D. Flow - Continuous, (Max 30-Day) 2.233 MGD
- E. Receiving waters - Mississippi River
- F. Basin and segment - Mississippi River Basin, Segment 070301

Internal Outfall 102

- A. Type of wastewater - The continuous discharge of once-through noncontact cooling water (alternate routing used if Outfall 001 is blocked and/or in need of repair).
- B. Location - At the point of discharge in the Ecology Area on the north side of the fore- and aftbays on 9th Street prior to combining with the waters of Internal Outfall 202 (Latitude 29°48'31", Longitude 90°00'39").
- C. Treatment - None
- D. Flow - Intermittent, 1.713 MGD
- E. Receiving waters - Mississippi River via Final Outfall 002
- F. Basin and segment - Mississippi River Basin, Segment 070301

Internal Outfall 202

- A. Type of wastewater - The continuous discharge of treated process wastewater and process area stormwater, incinerator scrubber blowdown, landfill leachates, hydrostatic test waters, reverse osmosis unit rejection water, regeneration streams, boiler

Fact Sheet and Rationale for
Chevron Oronite Company, LLC, Oak Point Plant
LA0005738, AI No. 1708
Page 5

blowdown, ballast wastewater, and miscellaneous wastewaters including but not limited to maintenance and cleaning wastewaters.

B. Location - At the point of discharge in the Ecology Area on the north side of the fore- and aftbays on 9th Street, after mixing of the treated process wastewater from the effluent of the PACT Unit and the effluent of the Sulfite Oxidation Unit with the Stormwater from the discharge of the Wemco Unit, prior to mixing with the waters of Internal Outfall 102 (Latitude 29°48'31", Longitude 90°00'39").

C. Treatment - Treatment of process wastewaters consists of:

- oil/water separator
- equalization/neutralization
- aeration basin
- biological treatment
- induced air flotation
- filtration
- chemical oxidation

D. Flow - Continuous, (Max 30-Day) 2.233 MGD

Process Area Reaction Water(*1)	2.132 MGD
Landfill Leachate (*1)	0.010 MGD
Non-process Area Stormwater(*1)	0.194 MGD
Water Treatment(*1)	0.019 MGD
Thermal Units (net)(*1)	0.002 MGD
Deepwell Injection(*2)	(-)0.126 MGD

(*1) Specific component waste streams are defined at Appendix A-1.

(*2) 0.126 MGD is injected into a Deep Well (this amount is not included in the continuous Max 30-Day flow of 2.233 MGD).

E. Receiving waters - Mississippi River via Final Outfall 002

F. Basin and segment - Mississippi River Basin, Segment 070301

Outfall 003

A. Type of wastewater - Intermittent discharge of hydrostatic test waters from the PIB spheres.

B. Location - At the PIB Spheres in the PIB Unit (Latitude 29°48'19", Longitude 90°00'34").

C. Treatment - None

D. Flow - Intermittent

Fact Sheet and Rationale for
Chevron Oronite Company, LLC, Oak Point Plant
LA0005738, AI No. 1708
Page 6

E. Receiving waters - Mississippi River

F. Basin and segment - Mississippi River Basin, Segment 070301

VIII. Proposed Permit Limits:

The specific effluent limitations and/or conditions will be found in the draft permit. Development and calculation of permit limits are detailed in the Permit Limit Rationale section below.

Summary of Proposed Changes From the Current LPDES Permit:

- A. Internal Outfall 202 - Deletion of monitoring requirements for Total Ammonia (as N) and Total Phosphorus. These parameters were established to address phosphorus and nitrogen impairments in the Mississippi River (Subsegment 070301) as indicated in the Court Ordered 303 (d) list at the time of the last permit issuance. The most recent listing for impaired waterbodies (the 2006 Final Integrated Report) did not contain phosphorus or nitrogen as impairments in Subsegment 070301, therefore, these parameters have been deleted.

The LDEQ is aware of the occurrence of a low oxygen hypoxic or "dead zone" in the Gulf of Mexico and its relationship to nutrients and fresh water from the Mississippi River and has developed a criteria development plan for state waters in coordination with the EPA to create defensible nutrient criteria based on the best available science. Work on criteria for the Mississippi River is an ongoing effort and will require further scientific investigation because of the complex nature of the large Mississippi watershed which includes over 30 states and two Canadian Provinces. A reopener clause has been established in the permit in accordance with LAC 33:IX.2903 which allows LDEQ to modify, or alternatively, revoke and reissue the permit to comply with any more stringent nutrient limitations or requirements that are promulgated in the future.

- B. Outfall 003 - Outfall newly created to include Hydrostatic test water. The limitations are consistent with the Hydrostatic test water general permit. Upon issuance of this permit, the facility's coverage under LAG670106 will be terminated.
- C. Outfall 002 - Flow has been added as a monitoring requirement to this Outfall and will be reported as the sum of Internal Outfalls 102 and 202 when both are discharging. In the event that 102 is not discharging, the flow will be reported as that from 202 only. The monitoring frequency will be 3/week based on BPJ.

Fact Sheet and Rationale for
Chevron Oronite Company, LLC, Oak Point Plant
LA0005738, AI No. 1708
Page 7

- D. Internal Outfall 202 - The Process Area Stormwater credit of 0.171 MGD from the previous permit has been removed. Upon review of the Application's Flow Diagram, it was discovered that credit for this amount had already been received as part of the Total Process Flow of 2.232 MGD.
- E. Internal Outfall 202 - Permit limitations have decreased due to a decrease in process flow from 2.232 MGD to 2.132 MGD. These limitations were calculated in accordance with the OCPSF Guidelines at 40 CFR 414 (Subparts G, H, and I). Limitations at this outfall also differ due to a change in the breakdown of percent production by subpart. The current LPDES permit effective September 1, 2004 was based on a production of 1.2% for Subpart G and 98.8% for Subpart H. The values submitted in the April 23, 2009 LPDES permit renewal application were 26.55% for Subpart G and 73.45% for Subpart H. Therefore, the limitations are based on the updated flow rate and the revised subpart percentages presented in the April 23, 2009 submittal.
- F. The facility requested that the maximum 30-day average flow for Internal Outfall 202 from August 2002 (2.572 MGD) be used in establishing permit effluent limitations for that outfall due to a decrease in stormwater that has resulted in almost 0.3 MGD less stormwater runoff from the previous permit cycle. This request has been denied. LDEQ standard practice is to use the Max 30 day flows from the previous two (2) years.

IX. Permit Limit Rationale:

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. Also set forth are any calculations or other explanations of the derivation of specific effluent limitations and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under LAC 33:IX.2707/40 CFR Part 122.44 and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

A. TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Following regulations promulgated at LAC 33:IX.2707.L.2.b/40 CFR Part 122.44(1)(2)(ii), the draft permit limits are based on either technology-based effluent limits pursuant to LAC 33:IX.2707.A/40 CFR Part 122.44(a) or on State water quality standards and requirements pursuant to LAC 33:IX.2707.D/40 CFR Part 122.44(d), whichever are more stringent.

Fact Sheet and Rationale for
Chevron Oronite Company, LLC, Oak Point Plant
LA0005738, AI No. 1708
Page 8

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS, CONDITIONS, AND MONITORING REQUIREMENTS

Regulations promulgated at LAC 33:IX.2707.A/40 CFR Part 122.44(a) require technology-based effluent limitations to be placed in LPDES permits based on effluent limitations guidelines where applicable, on BPJ (best professional judgement) in the absence of guidelines, or on a combination of the two. The following is a rationale for types of wastewaters. Regulations also require permits to establish monitoring requirements to yield data representative of the monitored activity [LAC 33:IX.2715/40 CFR 122.48(b)] and to assure compliance with permit limitations [LAC 33:IX.2707.I./40 CFR 122.44(i)].

1. **Outfall 001** - The continuous discharge of once-through noncontact cooling water, boiler blowdown, and intermittent discharge from Internal Outfall 101 (including clarifier underflow, filter backwash, and softener blowdown) being discharged receive limitations/monitoring requirements according to the following schedule:

PARAMETER(S)	MASS, LBS/DAY unless otherwise stated		CONCENTRATION, MG/L unless otherwise stated		MEASUREMENT FREQUENCY
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	
Flow, MGD	Report	Report	---	---	Continuous
pH Range Excursions No. of Events >60 minutes	---	---	---	0 (*1)	Continuous
pH Range Excursions Monthly Total Accumulated Time in Minutes	---	---	---	446 (*1)	Continuous
pH (Standard Units)	---	---	Report (*1) (Min)	Report (*1) (Max)	Continuous
Phenol (*2)	---	---	---	0.1	1/month
TOC (net) (*3)	---	---	---	5	1/week
Biomonitoring Requirement (*4)	See Section IX.D	See Section IX.D	---	---	1/year

Fact Sheet and Rationale for
Chevron Oronite Company, LLC, Oak Point Plant
LA0005738, AI No. 1708
Page 9

- (*1) The pH shall be within a range of 6.0 - 9.0 Standard Units at all times subject to the continuous monitoring pH range excursion provision in Part II, Paragraph H of the draft permit.
- (*2) Required when Internal Outfall 102 is routed through Outfall 001.
- (*3) The daily TOC concentration of the once-through cooling water system effluent less the daily TOC concentration of the once-through cooling water system intake shall not exceed 5 mg/L. Concurrent sampling of cooling water system intake effluent is required.
- (*4) The permittee shall pull the Biomonitoring sample as a flow-weighted composite of Outfalls 001 and 002 when both are discharging. In the event that Outfall 001 is not discharging, the sample shall be pulled from Outfall 002. The results shall be reported on the DMR as Outfall TX2.

Flow - This requirement has been established in accordance with LAC 33:IX.2707.I.1.b. and retained from the current LPDES permit.

pH - This requirement has been established in accordance with LAC 33:IX.1113.C.1. and retained from the current LPDES permit. The continuous monitoring frequency has also been retained.

Phenol - The limitation for Total Phenol has been retained from the current LPDES permit. This limitation was originally established in the February 25, 1978 NPDES Permit and was applied based on BPJ due to its presence in the Outfall discharge.

TOC - This limitation was retained from the current LPDES permit, and is consistent with current guidance for once-through cooling water discharges.

2. **Internal Outfall 101** - The intermittent discharge of the underflow stream from the raw river water intake clarification system, filter backwash, and softener blowdown being discharged receive limitations/monitoring requirements according to the following schedule:

PARAMETER(S)	MASS, LBS/DAY unless otherwise stated		CONCENTRATION, MG/L unless otherwise stated		MEASUREMENT FREQUENCY (*1)
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	
Flow, MGD	Report	Report	---	---	1/week

(*1) When discharging.

Fact Sheet and Rationale for
Chevron Oronite Company, LLC, Oak Point Plant
LA0005738, AI No. 1708
Page 10

Flow - This requirement has been established in accordance with LAC 33:IX.2707.I.1.b. and retained from the current LPDES permit.

3. Outfall 002 - The continuous discharge of wastewaters from Internal Outfalls 102 and 202 being discharged receive limitations/monitoring requirements according to the following schedule:

PARAMETER(S)	MASS, LBS/DAY unless otherwise stated		CONCENTRATION, MG/L unless otherwise stated		MEASUREMENT FREQUENCY
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	
Flow, MGD (*1)	Report	Report	---	---	3/week
Biomonitoring Requirement (*2)	See Section IX.D	See Section IX.D	---	---	1/year

(*1) The permittee shall report the flow as the sum of Internal Outfalls 102 and 202. In the event that Internal Outfall 102 is not discharging, the flow shall be reported as that of Internal Outfall 202.

(*2) The permittee shall pull the Biomonitoring sample as a flow-weighted composite of Outfalls 001 and 002 when both are discharging. In the event that Outfall 001 is not discharging, the sample shall be pulled from Outfall 002. The results shall be reported on the DMR as Outfall TX2.

Flow - This requirement has been established in accordance with LAC 33:IX.2707.I.1.b. Flow will be reported as the sum of Internal Outfalls 102 and 202 when both are discharging. In the event that 102 is not discharging, the flow will be reported as that of 202 only. The frequency is 3/week based on BPJ.

Fact Sheet and Rationale for
Chevron Oronite Company, LLC, Oak Point Plant
LA0005738, AI No. 1708
Page 11

4. Internal Outfall 102 - The continuous discharge of once-through noncontact cooling water (alternate routing used if Outfall 001 is blocked and/or in need of repair) being discharged receive limitations/monitoring requirements according to the following schedule:

PARAMETER(S)	MASS, LBS/DAY unless otherwise stated		CONCENTRATION, MG/L unless otherwise stated		MEASUREMENT FREQUENCY (*1)
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	
Flow, MGD	Report	Report	---	---	Continuous
pH Range Excursions No. of Events >60 minutes	---	---	---	0 (*2)	Continuous
pH Range Excursions Monthly Total Accumulated Time in Minutes	---	---	---	446 (*2)	Continuous
pH Standard Units	---	---	Report (*2) (Min)	Report (*2) (Max)	Continuous
Phenol	---	---	---	0.1	1/month
TOC (net) (*3)	---	---	---	5	1/week

(*1) When discharging.

(*2) The pH shall be within a range of 6.0 - 9.0 Standard Units at all times subject to the continuous monitoring pH range excursion provision in Part II, Paragraph H of the draft permit.

(*3) The daily TOC concentration of the once-through cooling water system effluent less the daily TOC concentration of the once-through cooling water system intake shall not exceed 5 mg/L. Concurrent sampling of cooling water system intake effluent is required.

Flow - This requirement has been established in accordance with LAC 33:IX.2707.I.1.b. and retained from the current LPDES permit.

pH - This requirement has been established in accordance with LAC 33:IX.1113.C.1. and retained from the current LPDES permit. The continuous monitoring frequency has also been retained.

Fact Sheet and Rationale for
Chevron Oronite Company, LLC, Oak Point Plant
LA0005738, AI No. 1708
Page 12

Phenol - The limitation for Total Phenol has been retained from the previous permit. This limitation was originally established in the February 25, 1978 NPDES Permit and was applied based on BPJ due to its presence in the Outfall discharge.

TOC - This limitation was retained from the current LPDES permit, and is consistent with current guidance for once-through cooling water discharges.

5. **Internal Outfall 202** - The continuous discharge of treated process wastewater and process area stormwater, incinerator scrubber blowdown, landfill leachates, hydrostatic test waters, reverse osmosis unit rejection water, regeneration streams, boiler blowdown, ship ballast wastewater, and miscellaneous wastewaters including but not limited to maintenance and cleaning wastewaters being discharged receive limitations/monitoring requirements according to the following schedule:

Chevron Oronite Company, LLC, Oak Point Plant is subject to Best Practicable Control Technology Currently Available (BPT) and Best Available Technology Economically Achievable (BAT) effluent limitation guidelines listed below:

Manufacturing Operation

Guideline

Organic Chemical Manufacturing

414 Subparts G, H, and I

Subpart G = Bulk Organic Chemicals.

Subpart H = Specialty Organic Chemicals.

Subpart I = Direct Discharge Point Sources That Use End-Of-Pipe Biological Treatment.

PARAMETER(S)	MASS, LBS/DAY unless otherwise stated		CONCENTRATION, MG/L unless otherwise stated		MEASUREMENT FREQUENCY
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	
Flow, MGD	Report	Report	---	---	Continuous
pH Range Excursions No. of Events >60 minutes	---	---	---	0 (*1)	Continuous

Fact Sheet and Rationale for
Chevron Oronite Company, LLC, Oak Point Plant
LA0005738, AI No. 1708
Page 13

PARAMETER(S)	MASS, LBS/DAY unless otherwise stated		CONCENTRATION, MG/L unless otherwise stated		MEASUREMENT FREQUENCY
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	
pH Range Excursions Monthly Total Accumulated Time in Minutes	---	---	---	446 (*1)	Continuous
pH (Standard Units)	---	---	Report (*1) (Min)	Report (*1) (Max)	Continuous
BOD ₅	746	1995	---	---	1/week
TSS	973	3130	---	---	1/week
Oil & Grease	186	372	---	---	1/week
Acrylonitrile	1.62	4.09	---	---	1/year
Benzene	0.63	2.30	---	---	1/year
Carbon Tetrachloride	0.30	0.64	---	---	1/year
Chlorobenzene	0.25	0.47	---	---	1/year
Chloroethane	1.76	4.53	---	---	1/year
Chloroform	0.36	0.78	---	---	1/year
1,2-Dichlorobenzene	1.30	2.76	---	---	1/year
1,3-Dichlorobenzene	0.52	0.74	---	---	1/year
1,4-Dichlorobenzene	0.25	0.47	---	---	1/year
1,1-Dichloroethane	0.37	1.00	---	---	1/year
1,2-Dichloroethane	1.15	3.57	---	---	1/year
1,1-Dichloroethylene	0.27	0.42	---	---	1/year
1,2-trans- Dichloroethylene	0.36	0.91	---	---	1/year
1,2-Dichloropropane	2.59	3.89	---	---	1/year
1,3-Dichloropropylyene	0.49	0.74	---	---	1/year

Fact Sheet and Rationale for
Chevron Oronite Company, LLC, Oak Point Plant
LA0005738, AI No. 1708
Page 14

PARAMETER(S)	MASS, LBS/DAY unless otherwise stated		CONCENTRATION, MG/L unless otherwise stated		MEASUREMENT FREQUENCY
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	
Ethylbenzene	0.54	1.83	---	---	1/year
Methyl Chloride	1.45	3.21	---	---	1/year
Methylene Chloride	0.68	1.51	---	---	1/year
Tetrachloroethylene	0.37	0.95	---	---	1/year
Toluene	0.44	1.35	---	---	1/year
1,1,1-Trichloroethane	0.36	0.91	---	---	1/year
1,1,2-Trichloroethane	0.36	0.91	---	---	1/year
Trichloroethylene	0.36	0.91	---	---	1/year
Vinyl Chloride	1.76	4.53	---	---	1/year
2-Chlorophenol	0.52	1.66	---	---	1/year
2,4-Dichlorophenol	0.66	1.89	---	---	1/year
2,4-Dimethylphenol	0.30	0.61	---	---	1/year
4,6-Dinitro-o-Cresol	1.32	4.69	---	---	1/year
2,4-Dinitrophenol	1.20	2.08	---	---	1/year
2-Nitrophenol	0.69	1.17	---	---	1/year
4-Nitrophenol	1.22	2.10	---	---	1/year
Phenol	0.25	0.44	---	---	1/month
Acenaphthene	0.37	1.00	---	---	1/year
Acenaphthylene	0.37	1.00	---	---	1/year
Anthracene	0.37	1.00	---	---	1/year
Benzo (a) anthracene	0.37	1.00	---	---	1/year
Benzo (a) pyrene	0.39	1.03	---	---	1/year
3,4-Benzofluoranthene	0.39	1.03	---	---	1/year

Fact Sheet and Rationale for
Chevron Oronite Company, LLC, Oak Point Plant
LA0005738, AI No. 1708
Page 15

PARAMETER(S)	MASS, LBS/DAY unless otherwise stated		CONCENTRATION, MG/L unless otherwise stated		MEASUREMENT FREQUENCY
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	
Benzo(k) fluoranthene	0.37	1.00	---	---	1/year
Bis(2-ethylhexyl)phthalate	1.74	4.72	---	---	1/year
Chrysene	0.37	1.00	---	---	1/year
Diethyl phthalate	1.37	3.43	---	---	1/year
Dimethyl phthalate	0.32	0.80	---	---	1/year
Di-n-butyl phthalate	0.46	0.96	---	---	1/year
2,4-Dinitrotoluene	1.91	4.82	---	---	1/year
2,6-Dinitrotoluene	4.31	10.84	---	---	1/year
Fluoranthene	0.42	1.15	---	---	1/year
Fluorene	0.37	1.00	---	---	1/year
Hexachlorobenzene	0.25	0.47	---	---	1/year
Hexachlorobutadiene	0.34	0.83	---	---	1/year
Hexachloroethane	0.36	0.91	---	---	1/year
Naphthalene	0.37	1.00	---	---	1/year
Nitrobenzene	0.46	1.15	---	---	1/year
Phenanthrene	0.37	1.00	---	---	1/year
Pyrene	0.42	1.13	---	---	1/year
1,2,4-Trichlorobenzene	1.15	2.37	---	---	1/year

(*1) The pH shall be within a range of 6.0 - 9.0 Standard Units at all times subject to the continuous monitoring pH range excursion provision in Part II, Paragraph H. of the draft permit.

Flow - This requirement has been established in accordance with LAC 33:IX.2707.I.1.b. and retained from the current LPDES permit.

Fact Sheet and Rationale for
Chevron Oronite Company, LLC, Oak Point Plant
LA0005738, AI No. 1708
Page 16

pH - This requirement has been established in accordance with LAC 33:IX.1113.C.1. and retained from the current LPDES permit. The continuous monitoring frequency has also been retained.

All Toxic Organics - Limitations established in accordance with OCPSF Guidelines under 40 CFR 414, Subpart I for direct discharge point sources that use end-of-pipe biological treatment. See Appendix A for a more detailed explanation of limitation calculations. A monitoring frequency of 1/year has been retained from the current LPDES permit for all except Phenol which has retained a monitoring frequency of 1/month.

BOD₅ and TSS - Monthly average and daily maximum limitations have been established in accordance with OCPSF Guidelines under 40 CFR 414, Subparts G (Bulk Organic Chemicals) and H (Specialty Organic Chemicals) with a process wastewater flow of 2.142 MGD. Additionally, allocations have been given for non-process area stormwater and utility wastewaters based on best professional judgment. Non-process area stormwater allocations are applied to a flow of 0.194 MGD and based on a 0.5 fraction of the OCPSF concentrations (21.04 mg/L monthly average and 56.28 mg/L daily maximum for BOD₅ and 27.44 mg/L monthly average and 88.31 mg/L daily maximum for TSS). Utility wastewater allocations are applied to a flow of 0.021 MGD and based on a fraction of 0.25 of the OCPSF concentrations (10.52 mg/L monthly average and 28.14 mg/L daily maximum for BOD₅ and 13.72 mg/L monthly average and 44.16 mg/L daily maximum for TSS). The monitoring frequencies of 1/week for both BOD₅ and TSS have been retained from the current LPDES permit.

Oil & Grease - Monthly average and daily maximum concentrations basis of 10 mg/L and 20 mg/L were retained from the current LPDES permit. Mass calculations and limits are based on the flow of 2.233 MGD. The monitoring frequency has been retained at 1/week (See Appendix A).

Site-Specific Consideration(s)

Deepwell Injection Fraction - Flow adjustments have been made to accommodate the percentage of effluent injected into the Deepwell. According to the application, this facility injects 0.124 MGD into the Deepwell. This number was divided by 2.357 to get the Deepwell injection fraction of 0.053.

Fact Sheet and Rationale for
Chevron Oronite Company, LLC, Oak Point Plant
LA0005738, AI No. 1708
Page 17

6. Outfall 003 - Hydrostatic test waters from the PIB Spheres being discharged receive limitations/monitoring requirements according to the following schedule:

PARAMETER(S) (*1)	MASS, LBS/DAY unless otherwise stated		CONCENTRATION, MG/L unless otherwise stated		MEASUREMENT FREQUENCY
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	
Flow, MGD	Report	Report	---	---	1/discharge event
TSS	---	---	---	90	1/discharge event
Oil & Grease	---	---	---	15	1/discharge event
TOC	---	---	---	50	1/discharge event
Benzene	---	---	---	50 µg/L	1/discharge event
Total BTEX	---	---	---	250 µg/L	1/discharge event
Total Lead	---	---	---	50 µg/L	1/discharge event
pH Standard Units	---	---	6.0 (min)	9.0 (max)	1/discharge event

(*1) Flow, TSS, Oil and Grease, and pH shall be measured on discharges from all new and existing pipelines, flowlines, vessels, or tanks. In addition, Total Organic Carbon (TOC) shall be measured on discharges from existing pipelines, flowlines, vessels, or tanks which have previously been in service; (i.e., those which are not new). Benzene, Total BTEX, and Total Lead shall be measured on discharges from existing pipelines, flowlines, vessels, or tanks which have been used for the storage or transportation of liquid or gaseous petroleum hydrocarbons.

Flow - In accordance with the LPDES General Permit for Hydrostatic Test Wastewater, LAG670000, a reporting requirement for monthly average flow and daily maximum flow of once per event has been established.

TSS, Oil & Grease, and TOC - In accordance with the LPDES General Permit for Hydrostatic Test Wastewater, LAG670000, a daily maximum limitation of 90 mg/L

Fact Sheet and Rationale for
Chevron Oronite Company, LLC, Oak Point Plant
LA0005738, AI No. 1708
Page 18

for TSS, 15 mg/L for Oil & Grease, and 50 mg/L for TOC with a monitoring frequency of once per event by grab sample has been established.

Benzene, Total BTEX, and Lead - In accordance with the LPDES General Permit for Hydrostatic Test Wastewater, LAG670000, a daily maximum limitation of 50 µg/L for Benzene, 250 µg/L for Total BTEX, and 50 µg/L for Lead with a monitoring frequency of once per event by grab sample has been established.

pH - In accordance with LAC 33:IX.1113.C.1 and the LPDES General Permit for Hydrostatic Test Wastewater, LAG670000.

C. WATER QUALITY-BASED EFFLUENT LIMITATIONS

Technology-based effluent limitations and/or specific analytical results from the permittee's application were screened against state water quality numerical standard based limits by following guidance procedures established in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, April 16, 2008. Calculations, results, and documentation are given in Appendix B.

In accordance with LAC 33:IX.2707.D.1/40 CFR § 122.44(d)(1), the existing (or potential) discharge (s) was evaluated in accordance with the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, April 16, 2008, to determine whether pollutants would be discharged "at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard." Calculations, results, and documentation are given in Appendix B.

The following pollutants received water quality based effluent limits:

POLLUTANT(S)
None

Minimum quantification levels (MQL's) for state water quality numerical standards-based effluent limitations are set at the values listed in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, April 16, 2008. They are also listed in Part II of the permit.

TMDL Waterbodies

Chevron Oronite discharges treated process wastewater, process area stormwater, once-through noncontact cooling water, boiler blowdown, clarifier underflow, filter backwash, softener blowdown,

Fact Sheet and Rationale for
Chevron Oronite Company, LLC, Oak Point Plant
LA0005738, AI No. 1708
Page 19

incinerator scrubber blowdown, non-process area stormwater, landfill leachates, hydrostatic test water, ballast wastewater, and miscellaneous wastewater to the Mississippi River, Segment No. 070301. The Mississippi River is not listed on the 2006 Final Integrated Report as being impaired. Therefore, no additional requirements have been established in this permit.

D. Biomonitoring Requirements

It has been determined that there may be pollutants present in the effluent which may have the potential to cause toxic conditions in the receiving stream. The State of Louisiana has established a narrative criteria which states, "toxic substances shall not be present in quantities that alone or in combination will be toxic to plant or animal life." The Office of Environmental Services requires the use of the most recent EPA biomonitoring protocols.

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates both the effects of synergism of effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. The biomonitoring procedures stipulated as a condition of this permit for Outfall(s) 001 and 002 are as follows:

TOXICITY TESTS

FREQUENCY

Acute static renewal 48-hour
definitive toxicity test
using Daphnia pulex

1/year

Acute static renewal 48-hour
definitive toxicity test
using fathead minnow (Pimephales
promelas)

1/year

Toxicity tests shall be performed in accordance with protocols described in the latest revision of the "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms." The stipulated test species are appropriate to measure the toxicity of the effluent consistent with the requirements of the State water quality standards. The biomonitoring frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge in accordance with regulations promulgated at LAC 33:IX.2715/40 CFR Part 122.48.

Fact Sheet and Rationale for
Chevron Oronite Company, LLC, Oak Point Plant
LA0005738, AI No. 1708
Page 20

Results of all dilutions as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen, conductivity, and alkalinity shall be documented in a full report according to the test method publication mentioned in the previous paragraph. The permittee shall submit a copy of the first full report to the Office of Environmental Compliance. The full report and subsequent reports are to be retained for three (3) years following the provisions of Part III.C.3 of this permit. The permit requires the submission of certain toxicity testing information as an attachment to the Discharge Monitoring Report.

This permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.3105/40 CFR 124.5. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

Dilution Series

The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional effluent concentrations shall be 0.3%, 0.4%, 0.6%, 0.8%, and 1%. The low-flow effluent concentration (critical dilution) is defined as 0.8% effluent.

X. Compliance History/DMR Review:

- A. DMRs for the period of January 2007 to April 2009 were reviewed. The following excursions were found:

DATE	PARAMETER	OUTFALL	REPORTED VALUE		PERMIT LIMITS	
			MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM
12/08	BOD ₅	202	1253	3353	943	2516

B. Inspection

Date of last inspection: December 23, 2008
Type of inspection: Water
Inspected by: David Frazier
Findings: No areas of concern noted

- C. There are no open Enforcement Actions for this facility.

Fact Sheet and Rationale for
Chevron Oronite Company, LLC, Oak Point Plant
LA0005738, AI No. 1708
Page 21

XI. "IT" Questions - Applicant's Responses

The "IT" Questions along with the applicant's responses can be found in the Permit Application (dated April 23, 2009).

XII. Stormwater Requirements

In accordance with LAC 33:IX.2707.I.3 and 4 [40 CFR 122.44(I)(3) and (4)], a Part II condition is proposed for applicability to all storm water discharges from the facility, either through permitted outfalls or through outfalls which are not listed in the permit or as sheet flow. For first time permit issuance, the Part II condition requires a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit. For renewal permit issuance, the Part II condition requires that the Storm Water Pollution Prevention Plan (SWP3) be reviewed and updated, if necessary, within six (6) months of the effective date of the final permit. If the permittee maintains other plans that contain duplicative information, those plans could be incorporated by reference to the SWP3. Examples of these type plans include, but are not limited to: Spill Prevention Control and Countermeasures Plan (SPCC), Best Management Plan (BMP), Response Plans, etc. The conditions will be found in the draft permit. Including Best Management Practice (BMP) controls in the form of a SWP3 is consistent with other LPDES and EPA permits regulating similar discharges of stormwater associated with industrial activity, as defined in LAC 33:IX.2511.B.14 [40 CFR 122.26(b)(14)].

XIII. Endangered Species:

The receiving waterbody, Subsegment 070301 of the Mississippi River Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the Pallid Sturgeon, which is listed as a threatened and/or endangered species. This draft permit has been submitted to the FWS for review in accordance with a letter dated 11/17/08 from Rieck (FWS) to Nolan (LDEQ). As set forth in the Memorandum of Understanding between the LDEQ and the FWS, and after consultation with FWS, LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse effect upon the Pallid Sturgeon. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

XIV. Historic Sites:

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the

Fact Sheet and Rationale for
Chevron Oronite Company, LLC, Oak Point Plant
LA0005738, AI No. 1708
Page 22

"Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

XV. Tentative Determination:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in the application.

XVI. Variances:

No requests for variances have been received by this Office.

XVII. Public Notices:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the fact sheet. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List